



LINXENS
CONNECTING YOU TO SUCCESS

MODULE PACKAGING SERVICE

For Pre-Laminates, White Cards and eID Products



LINXENS's in-house competence offers contactless module packaging of RFID memory and micro-controller ICs, manufactured with an automated pick and place machine. The module packaging service for different SMOXX modules provides a cost effective alternative and enables seamless integration into existing PRELAM® product designs, semi-finished card products and secure identification documents. These products are commonly used in applications such as access control, payment, transport and government credentials.

Upon receipt of the wafer at LINXENS, ICs are packaged into LINXENS SMOXX modules – the maximum chip size depends upon the chosen module package format, and is packed on lead frames and encapsulated with a black epoxy mold compound. LINXENS offers four module packing formats that comply with industry standards and fulfill highest standards in terms of quality, demonstrating high robustness and long lifespan.

The SMOXX chip modules are equally characterized by mechanical flexibility proven in Card Quality Management (CQM), bending & stamping tests, and meets customer expectations by delivering fast transaction rates and anti-collision features.

Overview

Operating Frequency
13.56 MHz

Operating Temperature
-30°C to +125°C

Integrated Circuit (IC)
ICs from leading suppliers

Material
Lead Frame material: CuSn6
Encapsulation: Epoxy based filled mold compound

International Standards

- JESD22-A103C
- JESD22-A110B
- JESD22-A104C

Application Area

- Access Control
- Automated Fare Collection
- Government, eID
- Payment

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Product	Dimension	Thickness	Operating Temperature	Available IC
SMOA2 [for cards]	4.8 x 5.1 mm	Max. 260 µm	-30°C to 125°C	Infineon, NXP, Samsung, ST
SMOA4 [for cards]	4.8 x 5.1 mm	Max. 260 µm	-30°C to 125°C	Infineon, NXP, Samsung, ST
SMOB6 [for eID]	4.8 x 5.1 mm	Max. 260 µm	-30°C to 125°C	Infineon, NXP, Samsung, ST
SMOB4 [for eID]	4.8 x 5.1 mm	Max. 340 µm	-30°C to 125°C	Infineon, NXP, Samsung, ST